Appendix B: Tables

The following tables are numbered in accordance with Chapter and Section numbers in the Kingman Field Office TMP EA document.

Tables

Table 1.2-1. Land Ownership within KFO

BLM Land (acres)	Tribal Land (Acres)	Other Federal Land (acres)	State Land (acres)	Private Land (acres)	Total (acres)
2,471,810	445,422	487,172	829,629	1,481,273	5,715,306

Table 1.2-2. Route Information within the Planning Area, by Use Level

Use Level	Number of Routes	Total Mileage
Heavy	4,784	1,722.29
Light	10,194	3,020.60
Moderate	1	0.16
Non-Existent	385	75.26
Undetermined	2,051	683.64

Table 1.2-3. Route Information within the Planning Area, by Route Type

Route Type	Number of Routes	Total Mileage
Primary Road Paved	74	74.57
Primary Road Unpaved	65	48.02
Reclaiming	603	158.20
Secondary Road Paved	54	10.66
Secondary Road Unpaved	815	370.78
Single Track	259	71.81
Tertiary Road Unpaved	15,545	4,767.89

Table 1.8-1. Resources Considered for Analysis

Determination	Resource	Rationale
Physical Resources		
PI	Air Quality (Including GHG)	See Sections 3.1 and 4.1.
NI	Floodplains	No threat to human safety, life, welfare, and property related to flooding and floodplains would result from implementing any of the alternatives.
NI	Hydrology, Ground	There would be no impact to ground water hydrology with implementation of any alternative. The action alternatives consist of surface activities.
PI	Surface Water and Water Quality	See Sections 3.3 and 4.3.
NI	Minerals, Fluid	Access for any exploration and development activity is described and approved in Geophysical Notice of Intent or Applications for Permit to drill). There would be no impact to fluid minerals by any of the alternatives.
NI	Minerals, Solid	Access for any mining activity is described and approved in mining plan(s) or oil and gas lease(s). There would be no impact to solid minerals by any of the alternatives.
PI	Soils	See Sections 3.2 and 4.2.
NI	Water Quality, Ground	The establishment of a travel network would not impact ground water quality as the actions proposed are surface disturbing only.
Biological Resources		
PI	Upland Vegetation, Wetlands, and Riparian Zones	See Sections 3.4 and 4.4.
PI	Special Status Wildlife and Plant Species	See Sections 3.7 and 4.7.
PI	Invasive, Non-native Species	See Sections 3.5 and 4.5.
PI	Wildlife, Terrestrial, Aquatic, and Migratory Birds	See Sections 3.6 and 4.6.
NI	Wild Horses and Burros	The establishment of a travel network would not impact the normal movement, dispersal, and population dynamics to wild horses and burros.

Determination	Resource	Rationale
Heritage Resources and the Human Environment		
PI	Cultural Resources	See Sections 3.13 and 4.13.
NI	Environmental Justice	Implementation of the action alternatives would not disproportionally impact low-income populations as they are disbursed throughout the entire KFO.
NI	Hazardous or Solid Wastes	There is potential for hazardous or solid waste issues. Hazardous or solid wastes would be handled according to the appropriate corrective action for releases.
NP	Lands with Wilderness Characteristics (Managed)	The 1995 Kingman ROD and RMP did not allocate Lands with Wilderness Character. Therefore, no managed Lands With Wilderness Characteristics are present within the KFO.
PI	Lands with Wilderness Characteristics (Inventoried)	See Sections 3.10 and 4.10.
PI	Native American Concerns	See Sections 3.14 and 4.14.
PI	Paleontological Resources	See Sections 3.15 and 4.15.
PI	Social and Economic Conditions	See Sections 3.18 and 4.18.
PI	Visual Resources	See Sections 3.19 and 4.19.
Resource Uses		
PI	Access and Transportation	See Sections 3.16 and 4.16.
NI	Fuels/Fire Management	Fuels/Fire Management is not expected to be impacted by route designations. Emergency fire suppression activities are an authorized use regardless of designation.
NP	Forest Management	There are no forest resources present within the Project area.
NI	Livestock Operations	See Sections 3.9 and 4.9.
NP	Prime or Unique Farmlands	See Sections 3.2 and 4.2.
NI	Realty Authorizations, Land Tenure	Route designations would not impact existing lands and realty authorizations (existing rights) within the Project area.
PI	Recreation	See Sections 3.17 and 4.17.

Determination	Resource	Rationale
Special Designations		
PI	Areas of Critical Environmental Concern	See Sections 3.11 and 4.11.
PI	National Natural Landmark	See Sections 3.12 and 4.12.
NP	Wild & Scenic Rivers	Forty-nine miles of proposed Wild and Scenic River exists within the KFO of which 28 miles are located in designated Wilderness Areas where vehicular use is prohibited. No routes exist within the remaining 21 miles located outside of designated Wilderness Areas. Therefore, route designation proposals would not affect the proposal to designate these segments in the future.
PI	Wilderness	Wilderness areas would be impacted by route designations. The overall integrity of the wilderness character within the designated Wilderness areas would be maintained as no changes or additions to the route networks would occur.
NP	Wilderness Study Areas	There are no wilderness study areas present within the KFO.

NP = Not present in the area impacted by the alternatives. NI = Present, but not affected to a degree such that detailed analysis is required. PI = Present with potential for impact and analyzed in detail in the EA.

Table 2.2-1. Comparison of Alternatives (Route Miles*)

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	2,726.08	1,630.75	832.12
Limited (Administrative and Authorized Users)	5.83	988.82	399.26	100.73
Limited (Administrative and Seasonal)	0	3.84	64.55	12.12
Limited (Non-Motorized)	27.19	71.38	52.93	49.73
Limited (OHV Width)	0	3.87	37.57	44.05
Open	5,469.72	1,708.76	3,317.68	4,464.00
Routes Remaining Open (%)	100	50	70	85
Total	**5,502.74**	**5,502.74**	**5,502.74**	**5,502.74**

*Miles correspond to the route evaluation database and any discrepancies in this table are due to rounding.

Table 2.3-1. Miles of Route Types under Alternative A

Type of Route	Miles*	Percentage
Closed	0	0.00
Limited (Admin and Authorized Users)	5.83	0.11
Limited (Admin and Seasonal)	0	0.00
Limited (Non-Motorized)	27.19	0.49
Limited (OHV Width)	0	0
Open	5,469.72	99
Total	**5,502.74**	**100**

*Miles correspond to the evaluation database and any discrepancies in this table are due to rounding.

Table 2.5-1. Miles of Route Types under Alternative B

Type of Route	Miles*	Percentage
Closed	2,726.08	49.54
Limited (Administrative and Authorized Users)	988.82	17.97
Limited (Administrative and Seasonal)	3.84	0.07
Limited (Non-Motorized)	71.38	1.30
Limited (OHV Width)	3.87	0.07
Open	1,708.76	31.05
Total	**5,502.74**	**100.00**

* Miles correspond to the evaluation database and any discrepancies in this table are due to rounding.

Table 2.6-1. Miles of Route Types under Alternative C

Type of Route	Miles*	Percentage
Closed	1,630.75	29.64
Limited (Administrative and Authorized Users)	399.26	7.26
Limited (Administrative and Seasonal)	64.55	1.17
Limited (Non-Motorized)	52.93	0.96
Limited (OHV Width)	37.57	0.68
Open	3,317.68	60.29
Total	**5,502.74**	**100**

* Miles correspond to the evaluation database and any discrepancies in this table are due to rounding.

Table 2.7-1. Miles of Specific Route Types (Alternative D)

Type of Route	Miles*	Percentage
Closed	832.12	15.12
Limited (Admin and Authorized Users)	100.73	1.83
Limited (Admin and Seasonal)	12.12	0.22
Limited (Non-Motorized)	49.73	0.90
Limited (OHV Width)	44.05	0.80
Open	4,464.00	81.12
Total	**5,502.74**	**100**

* Miles correspond to the evaluation database and any discrepancies in this table are due to rounding.

Table 2.8-1. Alternatives Considered but Eliminated from Further Analysis

Alternative Considered	Reason for Elimination from Further Consideration
One area would be open to off-highway vehicle use contingent upon compliance with Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act and development of a management plan; North of Golden Shores along old Highway 66, sec.36, all; sec.35, E1/2 and sec. 25, S1/2, T. 17 N., R. 21W.	Due to resource concerns raised as part of compliance with the Section 106 process, the area would not be a viable alternative moving forward.
An open area would be proposed on Red Lake if, in the future, private lands in the playa could be acquired through exchange and public access could also be acquired.	Private lands located in the playa have not been acquired by the BLM and are now being actively farmed by private land owners. Additionally, an "Open Area" designation is an RMP decision, which is outside the scope of this project at this time. Therefore, this alternative was eliminated from further consideration.
Most areas of critical environmental concern, including riparian areas and Category I desert tortoise areas, contain off-highway vehicle use designations specific to each area. These designations are listed in the management prescriptions for each area in the Special Management Area section for this alternative. In addition, off-highway vehicle use in Cerbat Foothills Recreation Area would be limited to designated roads, trails and navigable washes.	Off-highway vehicle objectives for areas of critical environmental concern, riparian areas, and Category I desert tortoise habitat are contained in the Kingman ROD and RMP (BLM 1995). These objectives were identified as desired future conditions, which were folded into the evaluation criteria in the Kingman TMP. An alternative that focused solely on these objectives would not satisfy Federal Code 43 CFR 8342.1 which states that all route designations shall be based on the protection of the resources of the public lands, the promotion of the safety of all users of public lands, the minimization of conflicts among various uses of public lands; and in accordance with the criteria outlined in the TMP. Therefore, this alternative was eliminated from detailed analysis.

Table 3.2-1. Soil Characteristics of routes in the Project Area (Miles)

Soil Rating	Highly Fragile	Fragile	Moderately Fragile	Not Rated
Fragile Soils	1,399	3,249	71	774
Erosion Rating	**Severe**	**Moderate**	**Slight**	**Not Rated**
Wind Erosion Hazard	651	1,478	3,001	363
Water Erosion Hazard	2,246	1,312	1,573	363
Road Suitability Rating	**Poorly Suited**	**Moderately Suited**	**Well Suited**	**Not Rated**
Road Suitability	2,479	1,923	728	363

Source: NRCS 2017.

Notes: Soils "Not Rated" are either unmapped soils or miscellaneous units, such as rock outcrop or badlands.
Wind erodibility group rating of 1-3 = severe, 4-5 = moderate, 6-8 = slight.

Table 3.4-1. Level III and IV Ecoregions Found Within the Project Area

Level III	Level IV	Characteristics
Mojave Basin and Range	Arid Valleys and Canyonlands	Annual precipitation is 5-9 inches. Sparse shrubland, barren land, some cropland and pasture in Mohave Valley near Colorado River (mostly hay, alfalfa, cotton, and wheat), some wetlands at Topock Marsh. Wildlife habitat, rangeland, and recreation. Mostly public land.
	Eastern Mojave Basins	Annual precipitation is 7-11 inches. Shrubland, some barren land. Creosotebush, white bursage, pricklypear and cholla cacti, yucca, Mormon tea, and some blackbrush can be found. Grasses are sparse. A few Joshua trees at higher elevations. Riparian areas with willows, mesquite, and exotic tamarisk.
	Eastern Mojave Low Ranges and Arid Footslopes	Annual precipitation is 8-12 inches. Shrubland, some barren land. Wildlife habitat, recreation, rural residential, rangeland, mineral mining, public land. Scattered creosotebush, white bursage, Joshua trees and other yuccas, blackbrush, winterfat, spiny menodora, Mormon tea, big galleta, Indian ricegrass, and annual fescue. On rocky sites: cacti including silver cholla and beavertail.
	Lower Grand Canyon	Annual precipitation is 8-9 inches. Shrubland and barren land. Wildlife habitat, recreation and tourism. Mostly public land. Vegetation mostly absent but some scattered, salt-tolerant plants occur, such as iodinebush, saltgrass, fourwing saltbush, and alkali sacaton.
	Mojave Playas	Annual precipitation is 8-12 inches. Wildlife habitat. Some public land. Vegetation mostly absent but some scattered, salt-tolerant plants occur, typically near outer margins, such as iodinebush, saltgrass, fourwing saltbush, and alkali sacaton.
Arizona/New Mexico Plateau	Chino/Coconino Grasslands and Shrubsteppe	Annual precipitation is 11-18 inches Shrubland and grassland. Ranching and livestock grazing, wildlife habitat, some small areas of hay and pasture land in Chino Valley. Some urban and rural residential in towns. A mix of semi-desert grasslands, semi-desert shrub-steppe, and sagebrush shrublands that include blue grama, black grama, bottlebrush squirreltail, needle and thread, Indian ricegrass, fourwing saltbush, winterfat, Bigelow sagebrush, and Mormon tea. A few scattered juniper at higher elevations.
	Hualapai/Coconino Woodlands	Annual precipitation is 11-23 inches. Shrubland, evergreen woodland, and grassland. Ranching and livestock grazing, wildlife habitat, woodland uses such as firewood, hunting and gathering. Mostly public land.

Level III	Level IV	Characteristics
Arizona/New Mexico Mountains	Conifer Woodlands and Savannas	Annual precipitation is 13-25 inches. Evergreen woodland, shrubland, and some grassland. Ranching and livestock grazing, wildlife habitat, recreation and tourism, hunting, firewood and woodlot uses. Mostly public land.
	Lower Mogollon Transition	Annual precipitation is 12-25 inches. Shrubland, some sparse evergreen woodland at higher elevations, a few small areas of grassland. Some urban and residential land. Livestock grazing, recreation and tourism, wildlife habitat, some mineral mining. Mostly public land.
	Madrean Lower Montane Woodlands	Annual precipitation is 14-27 inches. Grassland. Some urban and residential land uses. Livestock grazing, recreation and tourism, wildlife habitat, hunting and gathering, firewood and woodlot uses, some mineral mining. Mostly public land
	Mogollon Transition Conifer Forests	Annual precipitation is 13-27 inches. Evergreen forest and woodland, some shrubland and grassland. Recreation and tourism, wildlife habitat, ranching and livestock grazing, forestry and woodlot uses, mineral mining, and hunting and gathering. Mostly public land.
Sonoran Basin and Range	Arizona Upland/Eastern Sonoran Basins	Annual precipitation is 7-13 inches. Shrubland, some grassland, and barren land. Urban, suburban, and residential land use in Tucson/Santa Cruz Valley area and in eastern margins of greater Phoenix metropolitan area. Small areas of pasture, hay, and cropland in McMullen Valley. Ranching and low- density livestock grazing, wildlife habitat, recreation. Mostly public land.
	Arizona Upland/Eastern Sonoran Mountains	Annual precipitation 3-7 inches. Gila and Colorado rivers and in Harquahala Plain. Military, wildlife habitat, recreation, some ranching and low-density livestock grazing, minor urban and rural residential uses.

Source: EPA 2017

Table 3.4-2. General Vegetation Zones in the Project Area

Ecological Systems	Acres	Percent of Project area
Grassland/Herbaceous	95,163	2
Scrub	4,188,688	73
Evergreen Forest	1,119,259	20
Woody Wetland	54,885	1
Emergent Herbaceous Wetlands	276	<1
Barren Lands	102,887	2
Altered or Disturbed Land Cover Types	12,796	<1
Developed and Agriculture Cover Types	50,997	1
Other Cover	95,475	2

Source: USGS National GAP Analysis Program 2004

Table 3.5-1. Noxious Weeds and Invasive Species Distribution

Common Name	Scientific Name	Distribution within the Project Area
Cheatgrass/Downy Brome	*Bromus tectorum L*	Scattered throughout project area
Red Brome	*Bromus rubens L.*	Throughout project area; widely distributed
Mediterranean Grass	*Schismus barbatus (Loefl. Ex L.) Thell.*	Throughout project area; widely distributed
Diffuse Knapweed	*Centaurea diffusa Lam.*	Hualapai Mountains adjacent to Hualapai Mountain Road
Malta Starthistle	*Centaurea melitensis L.*	U.S. Highway 93 north of I-40 and from community of SoHi to White Hills and springs located within Mount Wilson Wilderness area
Yellow Star Thistle	*Centaurea solstitialis L.*	Scattered along U.S. Highway 93 south of I-40
Bufflegrass	*Pennisetum ciliare*	Scattered along U.S. Highway 93 south of I-40
Scotch Thistle	*Onopordum acanthium L.*	Crozier Canyon allotment and Francis Creek allotment at Swale Tank
Sahara Mustard	*Brassica tournefortii*	Throughout project area; widely distributed
Black Mustard	*Brassica nigra*	Scattered throughout project area
Tamarisk Species	*Tamarix spp. L.*	Riparian areas and springs
Lehmann lovegrass	*Eragrostis Lehmanniana*	Scattered throughout project area
Jimmyweed	*Isocoma acradenius*	Hualapai and Detrital Valleys
Snakeweed	*Gutierrezia sarothrae or microcephala*	Throughout project area; widely distributed
Locoweed	*Astragalus spp.*	Throughout project area; widely distributed

Table 3.6-1. Big Game Species in the Analysis Area

Common Name (Scientific Name)	General Distribution in Arizona	Suitable Habitat on Public Lands within the Project Area
Desert bighorn sheep (*Ovis canadensis nelsoni*)	Southern and northwestern Arizona	Black Mountains Mount Wilson Aubrey Peak Complex
Pronghorn (*Antilocapra americana*)	Temperate grasslands of southeastern and northern Arizona, the Great Basin desertscrub of northern Arizona and the Sonoran desertscrub on the Cabeza Prieta Game Range	Grassland communities on Goodwin Mesa, in Hualapai Valley, Truxton and Dutch Flat
Mule deer (*Odocoileus hemionus*)	Boreal forests of Kaibab Plateau, San Francisco Peaks and White Mountains to creosote-bursage communities of the Sonoran Desert	All plant communities throughout the Basin and Range portion of the Kingman Resource Area provide habitat; densities range from sparse to high
Elk (*Cervus canadensis*)	Introduced into Arizona, now throughout much of the Mogollon Rim and the Hualapai Mountains	Remnant herd persists in the Hualapai Mountains; occasional dispersal into the Cerbat and Peacock mountains
Javelina (*Dicotyles tajacu*)	Throughout central, south- central and southeast Arizona, especially in riparian desert-scrub habitats	All plant communities in the Basin and Range portion of the resource area provide habitat: densities vary from sparse to high

Source: USGS National GAP Analysis Program 2004.

Table 3.7-1. Federally Listed Species that Could be Affected by the Project

Common Name	Scientific Name	Designation [a]
Southwestern willow flycatcher	*Empidonax traillii extimus*	LE, DCH
Yellow-billed cuckoo	*Coccyzus americanus*	LT, PCH
Mexican spotted owl	*Strix occidentalis lucida*	LT
Northern Mexican gartersnake	*Thamnophis eques megalops*	LT
Arizona cliffrose	*Purshia subintegra*	LE
Yuma Ridgway's rail	*Rallus obsoletus [=longirostris] yumanensis*	LE

Source: U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) decision support system (USFWS 2017a), <http://ecos.fws.gov/ipac/>, accessed November 14, 2017. Additional information on species distribution was identified in coordination with the BLM Biologist, Rebecca Peck.

[a] Status definitions: LE=Listed Endangered, LT=Listed Threatened, DCH=Designated Critical Habitat, PCH=Proposed Critical Habitat

Table 3.7-2. BLM Sensitive Species with Potential to Occur in the Project Area

Common Name	Scientific Name	Habitat Type
Invertebrates		
Kingman springsnail	*Pyrgulopsis conica*	This species is only known from three springs (Dripping, Cool and Burns) in Sacramento valley in the Black Mountains near Kingman.
Monarch butterfly	*Danaus plexippus plexippus*	Found in a variety of habitats that contain the host plant milkweed.
Fish		
Desert sucker	*Catostomus clarki*	Found in rapids and flowing pools of streams and rivers primarily over bottoms of gravel-rubble with sandy silt in the interstices. Elevation range: 480–8,840 feet amsl.
Longfin dace	*Agosia chrysogaster*	Generally found in water less than 75° F, but is tolerant of high temperatures and low dissolved oxygen. Elevation range: below 4,900 feet amsl.
Sonora sucker	*Catostomus insignis*	Found in a variety of habitats from warm water rivers to trout streams. Elevation range: 1,210 - 8,730 feet amsl.
Speckled dace	*Rhinichthys osculus*	Medium to large perennial streams with moderate to swift velocity waters over cobble and gravel substrate. Recurrent flooding and natural hydrograph important to withstand invading exotic species. Elevation range: below 6,000 feet amsl.
Amphibians		
Arizona toad	*Anaxyrus microscaphus*	Found within riparian area within desert, shrubland/chaparral, and woodland habitats
Lowland leopard frog	*Lithobates yavapaiensis*	Small to medium-sized streams, rivers, pools, and cienegas with shallow waters and emergent and perimeter vegetation. Elevation ranges from 480 to 6,200 feet amsl.
Relict leopard frog	*Lithobates onca*	Permanent streams, springs, and spring-fed wetlands with open shorelines and available pools. Elevation range: below 1,968 feet amsl.
Reptiles		
Sonoran desert tortoise	*Gopherus morafkai*	Primarily rocky hillsides and bajadas of Mojave and Sonoran desert scrub, but may encroach on grass land and juniper woodland, interior chaparral habitats, and even pine communities. Washes and valley bottoms may be used as dispersal.
Sonora mud turtle	*Kinosternon sonoriense sonoriense*	Habitat consists of springs, creeks, ponds, and waterholes of intermittent streams. Elevation range: below 6,700 feet amsl.

Common Name	Scientific Name	Habitat Type
Birds		
American peregrine falcon	*Falco peregrinus anatum*	Found near cliffs or tall buildings that support sufficient abundance of prey. Elevations range: 400-9,000 feet amsl.
Bald eagle	*Haliaeetus leucocephalus*	Habitat ranges from the saguaro-palo verde community up through the pinyon-juniper community. Strongly associated with cliff faces, ledges, pinnacles, and tall trees. Elevations range from 460- 7,930 feet amsl.
Desert purple martin	*Progne subis hesperia*	Generally inhabits open areas and prefers an open water source nearby in a wide variety of terrestrial habitats, including cropland, desert, grasslands, shrubland, suburban, conifer woodlands.
Ferruginous hawk	*Buteo regalis*	Open scrublands and woodlands, grasslands, and Semidesert Grassland. Elevation range: 3,500–6,000 feet amsl.
Gilded flicker	*Colaptes chrysoides*	Primary association with forests of giant cacti but can also be found in riparian woodlands. Elevation range: 200–3,200 feet amsl.
Golden eagle	*Aquila chrysaetos*	Open country, in prairies, arctic and alpine tundra, open wooded country and barren areas, especially in hilly or mountainous regions and nests on rock ledges, cliffs or in large trees. Elevation range: 4,000-10,000 feet amsl.
Le Conte's thrasher	*Toxostoma lecontei*	Inhabits desert flats, washes, and alluvial fans with sandy and/or alkaline soil and scattered shrubs.
Northern goshawk	*Accipiter gentilis atricapillus*	Wide variety of forest types including deciduous, coniferous and mixed forests. Elevation range: 4,750-9,120 feet amsl.
Pinyon jay	*Gymnorhinus cyanocephalus*	Prefers pinyon-juniper woodlands and ponderosa pine forests Elevation range: 4,000-11,500 feet amsl.
Western burrowing owl	*Athene cunicularia hypugaea*	Occurs in open, well-drained grasslands, steppes, deserts, prairies, and agricultural lands, often associated with burrowing mammals. Elevation range: 650–6,140 feet amsl.
Mammals		
Allen’s big-eared bat	*Idionycteris phyllotis*	Most often found in ponderosa pine, pinyon-juniper, Mexican woodland and riparian areas of sycamores, Roosts in caves and abandoned mineshafts. Elevation range: 3,500–7,500 feet amsl.
Arizona myotis	*Myotis occultus*	Found in ponderosa pine and oak-pine woodland near water and roosts in large snags, tree cavities, and crevices. Elevation range: 3,200-8,620 feet amsl.
California leaf-nosed bat	*Macrotus californicus*	Found mostly in Sonoran desertscrub and roosts in mines, caves, and rock shelters. Elevation range: below 4,000 feet amsl.
Cave myotis	*Myotis velifer*	Prefers desertscrub of creosote, brittlebush, palo verde, and cacti. Elevation range: 300-5,000 feet amsl.
Greater western mastiff bat	*Eumops perotis californicus*	Lower and upper Sonoran desertscrub near cliffs, preferring rugged, rocky canyons with abundant crevices. Elevation range: 240-8,475 feet amsl.

Common Name	Scientific Name	Habitat Type
Gunnison's prairie dog	*Cynomys gunnisoni*	Occur in high desert and montane grasslands, in habitat types such as montane meadows, hillsides, broad alluvial valleys, floodplains, and playas. Elevation range: 6,000-10,000 feet amsl.
Hualapai Mexican vole	*Microtus mexicanus hualpaiensis*	Prefer moist, grass/sedge habitats along permanent or semi-permanent waters. Elevation range: 5396-8398 feet amsl.
Spotted bat	*Euderma maculatum*	Habitat is varied. Most are captured in dry, rough desertscrub with a few captured or heard in ponderosa pine forest. Elevation range: 110-8,670 feet amsl.
Townsend's big-eared bat	*Corynorhinus (=Plecotus) townsendii*	Caves and mines from desertscrub up to woodlands and coniferous forests. Elevation range: 550-7,520 feet amsl.
Plants		
Aquarius milkvetch	*Astragalus newberryi var. aquaria*	Narrow range, limestone deposits, Burro Creek area.
Aravaipa woodfern	*Thelypteris puberula var. sonorensis*	Moist, granitic soils in the shade of boulders in mesic canyons. Elevation range: 2,200-4,500 feet amsl.
California flannelbush	*Fremontodendron californicum*	Grows primarily in well-drained, rocky, north-facing slopes and ridges with granite boulders, typically in chaparral and oak/pine woodland communities. Elevation range: 3,500-6,500 feet amsl.
Joshua tree	*Yucca brevifolia*	Occurs in hot, dry sites on flats, mesas, bajadas, and gentle slopes with well drained rocky soil. Elevation range: below 3,600 feet amsl.
Kearney sumac	*Rhus kearneyi ssp. kearneyi*	Grows in shade on arid, rocky, north to east-facing slopes of schist, gneiss, and granite, as well as along canyons and drainages. Elevation range: 1,000-2,000 feet amsl.
Parish phacelia	*Phacelia parishii*	Moist to superficially dry, open, flat to hummocky, mostly barren, often salt-crusted silty-clay soils on valley bottom flats, lake deposits. Elevation range: 2191- 5975 feet amsl.
Parish wild onion	*Allium parishii*	Found on rocky, sandy desert slopes. Elevation range: 3,000-4,500 feet amsl.
Pinto beardtongue	*Penstemon bicolor*	Grows in gravelly washes and disturbed roadsides, to outwash fans and plains, in well-drained soils of limestone or igneous bedrock. Elevation range: 1,970-5,480 feet amsl.
Silverleaf sunray	*Enceliopsis argophylla*	Dry, open, relatively barren areas on gypsum soils of Moenkopi Formation. Elevation range: 1165-2380 feet amsl.
White-margined penstemon	*Penstemon albomarginatus*	Sandy loam uplands and sandy washes in a broad alluvial plain. Elevation range: 2000-3000 feet amsl.

Source: BLM 1993; BLM 2017b

Table 3.8-1. Allotment Information for the Project Area

ID Number	Allotment Number	Allotment Name	Public Acres	Allotment Management Plan	Date Implemented	Management Category	Permitted AUMs	Suspended AUMs	Suspended Use Temporary
2	AZ00002	Arrastra	24,050	None	N/A	Improve	1,995	0	0
3	AZ00003	Artillery Range	76,171	None	N/A	Improve	4,016	2,370	0
22	AZ00004	Canyon Ranch Unit B	596	Implemented	03/01/1983	Custodial	38	0	0
5	AZ00005	Bagdad	26,378	Implemented	03/01/2001	Improve	2,437	696	0
6	AZ00006	Bateman Spring	20,759	Implemented	09/18/2001	Maintain	1,200	660	0
7	AZ00007	Big Ranch Unit A	115,719	Implemented	07/07/2003	Improve	5,760	363	0
9	AZ00008	Big Sandy	64,913	Proposed	N/A	Improve	9,110	2,168	0
10	AZ00009	Black Mesa Unit A	7,880	Implemented	09/01/1984	Improve	600	240	0
12	AZ00010	Black Mt Unit A	52,904	None	N/A	Maintain	2,982	1,735	0
13	AZ00011	Boriana Unit A	27,570	None	N/A	Maintain	2,279	0	0
15	AZ00013	Burro Creek	6,352	Implemented	09/12/1983	Improve	880	0	0
16	AZ00014	Burro Creek Ranch	34,967	Implemented	12/13/2010	Improve	1,674	0	0
20	AZ00016	Cane Springs Wash	2,310	None	N/A	Custodial	240	72	0
21	AZ00017	Canyon Ranch Unit A	20,879	Implemented	03/01/1983	Improve	1,798	0	0
23	AZ00018	Castle Rock	5,128	Implemented	8/17/1982	Improve	300	0	0
24	AZ00019	Cedar Canyon	43,927	Implemented	09/30/2000	Maintain	N/A	0	0
25	AZ00020	Cerbat	19,086	Implemented	10/01/2015	Improve	1,953	0	937
26	AZ00021	Chicken Springs	104,279	Implemented	09/18/2001	Improve	5,727	1,983	0
27	AZ00022	Chino Springs	18,992	None	N/A	Improve	N/A	N/A	N/A
28	AZ00023	Clay Springs	6,770	None	N/A	Maintain	403	0	0
29	AZ00024	Cook Canyon	4,358	None	N/A	Improve	279	0	0
31	AZ00026	Crozier Canyon	106,175	Implemented	4/1/1994	Improve	14,439	3,261	0

ID Number	Allotment Number	Allotment Name	Public Acres	Allotment Management Plan	Date Implemented	Management Category	Permitted AUMs	Suspended AUMs	Suspended Use Temporary
32	AZ00027	Curtain	3,250	Implemented	09/01/1981	Improve	195	N/A	N/A
36	AZ00028	Diamond Joe	16,223	None	N/A	Improve	2,321	917	0
37	AZ00030	Dolan Springs	37,222	Implemented	09/10/1982	Maintain	1,695	0	0
38	AZ00031	D O R	1,269	None	N/A	Custodial	N/A	N/A	N/A
39	AZ00032	Feldspar	640	None	N/A	Custodial	72	0	0
40	AZ00034	Fort Macewen Unit A	34,929	Implemented	10/01/2015	Improve	2,503	726	591
42	AZ00035	Francis Creek	112,968	Implemented	12/01/1999	Improve	14,786	0	0
43	AZ00036	Gediondia	13,794	None	N/A	Maintain	773	221	0
45	AZ00037	Gold Basin	48,884	Implemented	02/28/2006	Improve	2,943	0	0
46	AZ00038	Gray Wash	8,896	None	N/A	Improve	373	0	0
47	AZ00039	Greenwood Community	15,842	None	N/A	Improve	993	499	0
48	AZ00040	Greenwood Peak Community	36,180	None	N/A	Improve	1,827	0	0
49	AZ00041	Groom Peak	5,476	None	N/A	Improve	265	0	0
50	AZ00042	Hackberry	32,881	Implemented	03/01/1983	Improve	N/A	N/A	N/A
52	AZ00043	Happy Jack Wash	19,858	None	N/A	Maintain	876	0	0
55	AZ00046	Hot Springs	1,062	None	N/A	Custodial	52	52	0
56	AZ00047	Hualapai Peak	24,914	Implemented	08/26/1983	Improve	2,706	492	0
53/54	AZ00050	Hibernia Peak	47,270	Implemented	08/20/1999	Improve	2,622	0	0
59	AZ00051	La Cienega	68,658	Implemented	09/30/1999	Improve	N/A	N/A	N/A
60	AZ00052	Lazy Yu Unit A	12,852	None	N/A	Maintain	948	0	0
62	AZ00054	Los Molinos	17,600	None	N/A	Improve	2,820	564	0
64	AZ00055	Mineral Park	11,123	Implemented	09/01/1981	Improve	680	0	0

ID Number	Allotment Number	Allotment Name	Public Acres	Allotment Management Plan	Date Implemented	Management Category	Permitted AUMs	Suspended AUMs	Suspended Use Temporary
68	AZ00057	Music Mountain	18,664	Implemented	09/01/1980	Improve	2,451	627	0
65	AZ00058	Mount Tipton	8,564	None	N/A	Improve	230	0	0
70	AZ00059	Peacock Mountain	1,169	None	N/A	Custodial	132	0	0
71	AZ00060	Pine Springs	6,601	Implemented	08/13/1982	Improve	588	0	0
74	AZ00061	Portland Springs	8,709	None	N/A	Custodial	N/A	N/A	N/A
75	AZ00062	Quail Springs	31,304	Implemented	10/01/2015	Improve	2,614	0	87
77	AZ00064	Sandy	1,524	None	N/A	Custodial	198	138	0
80	AZ00066	Stockton Hill	2,912	Implemented	09/01/1981	Maintain	552	108	0
81	AZ00068	Thumb Butte	18,050	None	N/A	Custodial	0	0	0
84	AZ00070	Truxton Canyon Unit A	5,645	Implemented	01/03/1996	Improve	588	294	0
88	AZ00072	Valentine	5,160	Implemented	06/25/1995	Maintain	648	0	0
90	AZ00073	Walnut Creek	80,530	None	N/A	Improve	7,869	2,026	0
91	AZ00074	West Peacock	1,849	None	N/A	Custodial	204	0	0
92	AZ00076	Wikieup	8,446	None	N/A	Improve	684	0	0
89	AZ00077	Walapai Ranch	4,639	None	N/A	Custodial	N/A	0	0
93	AZ00078	Yellow Pine	58,506	Implemented	05/22/1998	Improve	5,940	0	0
14	AZ00079	Boriana Unit B	10,220	None	N/A	Custodial	0	0	0
35	AZ00080	Diamond Bar Unit B	49,400	Implemented	08/19/1982	Custodial	N/A	N/A	N/A
8	AZ00081	Big Ranch Unit B	114,504	None	N/A	Custodial	0	0	0
41	AZ00082	Fort MacEwen Unit B	31,174	Implemented	09/01/1980	Custodial	N/A	N/A	N/A
54	AZ00083	Hibernia Peak Unit B	19,357	Implemented	08/20/1999	Custodial	0	0	0
19	AZ00086	Cane Springs	48,312	Implemented	09/01/1981	Improve	2,851	0	0
61	AZ00087	Little Cane	5,542	None	N/A	Custodial	372	0	0

ID Number	Allotment Number	Allotment Name	Public Acres	Allotment Management Plan	Date Implemented	Management Category	Permitted AUMs	Suspended AUMs	Suspended Use Temporary
85	AZ00088	Truxton Canyon Unit B	414	Implemented	01/03/1996	Custodial	18	0	0
78	AZ00089	Santa Maria Ranch	27,574	None	N/A	Improve	2,880	1,188	0
33	AZ00090	D.G. Ranch	8,381	Implemented	03/01/2007	Custodial	936	0	0
82	AZ00091	Tres Alamos Ranch	15,777	Implemented	02/23/1984	Maintain	1,500	0	0
72	AZ00092	Pipeline Ranch	28,401	Implemented	05/01/1972	Maintain	1,838	0	0
	AZ00093	S.M. Grapevine Ranch	60,067	None	N/A	Improve	2,328	0	0
69	AZ00094	Palmerita Ranch	31,792	None	N/A	Improve	927	0	
34	AZ00098	Diamond Bar Unit A	63,073	Proposed	N/A	Improve	4,345	0	0
87	AZ00100	Upper Music Mountain	43,677	Implemented	09/01/1980	Improve	N/A	0	0
44	AZ00103	Gibson Cattle Company	10,550	None	N/A	Maintain	1,202	0	0
57	AZ00105	JJJ Corporation	290	None	N/A	Custodial	60	36	0
58	AZ00107	Kellis Lease	1,745	None	N/A	Custodial	320	224	0
11	AZ00110	Black Mesa Unit B	22,963	Implemented	09/01/1984	Improve	2,575	223	0
79	AZ00111	Scratch Canyon Lease	9,688	None	N/A	Improve	1,800	0	0
94	AZ00115	Yolo Ranch Lease	2,353	None	N/A	Custodial	366	0	0
18	AZ00116	Byner Cattle Company	1,287	None	N/A	Custodial	210	90	0
66	AZ00998	Mud Springs	19,821	Implemented	08/08/1983	Improve	889	0	0
63	AZ01705	Middle Water	14,536	Implemented	09/10/1999	Improve	753	200	0

Source: BLM 2017d

Table 3.9-1 Summary of Lands with the Presence for Wilderness Characteristics (Inventoried)

Lands with Wilderness Characteristics Inventory Unit	Acres	Presence of Wilderness Characteristics	Total Miles
Trail Rapids Hills	8,692	YES	1.28
Mount Perkins	49,452	YES	57.33
Black Mountains North	19,619	YES	4.06
Detrital Wash	10,771	NO	12.65
Joshua Tree Forest & Grapevine Wash	28,902	YES	16.69
Grand Wash Cliffs	15,433	YES	7.63
Red Lake	5,237	NO	4.75
Music Mountains North	35,373	YES	38.41
Cathedral Rock	4,824	YES	12.25
Boundary Plain	1,457	NO	4.00
Milltown	4,661	NO	7.26
Badlands	11,995	NO	27.88
Five Mile Wash	3,960	NO	8.16
The Boundary Cone Plain	6,301	NO	10.40
Dutch Flat North	15,459	YES	14.42
Castaneda Hills	29,207	YES	46.95
Castaneda Wash	12,821	YES	6.26
Black Mesa	14,690	YES	10.71
Centennial Wash	14,819	YES	50.32
Lower Burro Creek	22,866	YES	30.57
Aquarius Cliffs	64,447	YES	28.03
Greenwood Peak	15,591	YES	17.83
Scratch and Jerky Canyons	5,541	YES	7.21
Cornwall Canyon	6,267	YES	3.77
Mohave Wash North	8,064	YES	1.20
Dutch Flat South	12,925	YES	3.88
Dutch Flat West	5,895	NO	0.16
Devil’s Canyon	51,156	YES	71.51

Source: BLM 2018

Table 3.11-1. National Natural Landmarks within the Project Area

Site Name and Designation	Size (acres)	BLM Routes within NNL (miles)
Grapevine Mesa Joshua Trees Forest	3,206	14.88

Source: BLM 2017g

Table 3.14-1. PFYC Classes within the Kingman Field Office

PFYC Class	BLM Kingman FO Acreage
1	1,063,803
2	431,772
3	22,838
4	386,950
5	0
U	566,276
W	29

Table 3.16-1. Routes in SRMAs within the Project Area

Designation Category	Alternative A (No Action)
Closed	0
Limited (Admin and Authorized Users)	0.58
Limited (Admin and Seasonal)	0
Limited (Non-Motorized)	5.66
Limited (OHV Width)	0
Open	377.73
Total	**383.97**

*Differences due to rounding.

Table 3.17-1. Earnings by Industry, 2001-2015 (Thousands of 2016 dollars)*

Industry	2001 (percent)	2005 (percent)	2010 (percent)	2015 (percent)	Change 2010-2015 (percent)
Labor Earnings	**N/A**	**N/A**	**N/A**	**N/A**	**11.8**
Non-services related	~23.0	22.9	~13.6	16.1	~32.6
Farm	0.9	0.6	N/A	0.3	-1053.1
Forestry, fishing, & ag. services	~0.1	0.1	~0.1	0.0	~-54.6
Mining (including fossil fuels)	~1.6	1.2	2.3	1.8	-13.9
Construction	13.4	14.0	5.5	8.2	64.9
Manufacturing	7.0	7.0	5.7	5.8	14.5
Services related	**57.0**	**58.8**	**~63.9**	**65.0**	**~13.6**
Utilities	0.7	0.6	0.6	0.9	69.3
Wholesale trade	3.8	3.2	3.1	3.2	13.2
Retail trade	11.1	12.1	13.1	10.3	-11.9
Transportation and warehousing	2.8	2.5	2.6	4.1	78.1
Information	1.8	1.6	1.8	1.2	-23.6
Finance and insurance	2.9	3.2	2.5	2.4	4.4
Real estate and rental and leasing	1.9	3.6	1.2	2.9	161.8
Professional and technical services	3.6	4.0	3.6	4.1	26.0
Management of companies and enterprises	0.3	0.3	~0.2	0.1	~-23.7
Administrative and waste services	3.3	3.6	3.7	3.8	13.6
Educational services	1.3	1.6	2.1	2.2	18.5
Health care and social assistance	12.3	12.4	18.8	17.6	4.4
Arts, entertainment, and recreation	0.7	0.7	0.6	0.7	16.9
Accommodation and food services	4.6	4.7	4.7	6.2	47.6
Other services, except public administration	5.8	5.0	5.2	5.3	15.1
Government	**20.0**	**18.3**	**22.5**	**18.9**	**-6.1**

All earnings data are reported by place of work. Estimates for data that were not disclosed are indicated with tildes (~).

* Total is considered to be the sum of all reported or estimated income with positive values from the earnings by industry table. Differences due to rounding. Source: Headwater Economics 2017.

Table 3.17-2. Employment in Travel & Tourism, 2015

Industry	Mohave County, AZ (Percent)	Yavapai County, AZ (Percent)	Arizona (Percent)	U.S. (Percent)
Travel & Tourism Related	**~21.9**	**~21.4**	**18.1**	**15.6**
Retail Trade	**4.6**	**3.5**	**3.0**	**2.7**
Gasoline Stations	2.7	1.2	0.8	0.7
Clothing & Accessory Stores	0.8	0.8	1.4	1.4
Misc. Store Retailers	1.1	1.5	0.8	0.6
Passenger Transportation	**~0.2**	**~0.6**	**0.8**	**0.4**
Air Transportation	~0.2	~0.0	0.7	0.4
Scenic & Sightseeing Transport	~0.0	0.6	0.0	0.0
Arts, Entertainment, & Recreation	**~1.3**	**1.5**	**2.0**	**1.8**
Performing Arts & Spectator Sports	0.0	0.2	0.3	0.4
Museums, Parks, & Historic Sites	0.1	0.2	0.1	0.1
Amusement, Gambling, & Rec.	1.3	1.2	1.6	1.3
Accommodation & Food	**15.7**	**15.7**	**12.3**	**10.6**
Accommodation	2.7	3.9	2.2	1.6
Food Services & Drinking Places	13.0	11.8	10.1	9.0
Non-Travel & Tourism	**~78.1**	**~78.6**	**81.9**	**84.4**

The major industry categories (retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food) in the table above are the sum of the sub-categories underneath them and as shown here do not represent NAICS codes. The data does not include employment in government, agriculture, railroads, or the self-employed because these are not reported by County Business Patterns. Estimates for data that were not disclosed are indicated with tildes (~).

Differences due to rounding.

Source: Headwater Economics 2017.

Table 3.17-3. Federal Land & Development

Land Type	Mohave County, AZ (Percent)	Yavapai County, AZ (Percent)	U.S. (Percent)
Federal Land	70.7	49.9	28.2
Forest Service	0.1	38.2	8.4
BLM	56.1	11.7	10.6
Park Service	13.9	0.0	3.4
Military	0.0	0.0	1.0
Other	0.7	0.0	4.9
Federal land Type A*	50.1	18.2	41.8
Federal payments of gov. revenue, FY2012	3.2	4.4	--
Residential land area change, 2000-2010	46.4	31.1	12.3
Wildland-Urban Interface developed, 2010	3.7	21.3	16.3

*The share of Federal lands managed primarily for natural, cultural, and recreational features, such as national parks, wilderness area, national conservation area, and ACECs.

Differences due to rounding.
Source: Headwater Economics 2017.

Table 3.18-1. BLM Visual Resource Management Class Objectives

VRM Class	Management Objective
I	The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
II	The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
III	The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.
IV	The objective of this class is to provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Source: BLM 1986

Table 3.18-2. Existing Route Miles within VRM Classes

VRM Class	Route Miles
Class I	12.21
Class II	970.00
Class III	872.04
Class IV	3,626.01

Table 3.18-3. Existing Route Miles within Scenic Quality Ratings

Scenic Quality Ratings	Route Miles
A	2,159.03
B	1,750.36
C	1,584.06

Table 3.18-4. Existing Route Miles within Visual Sensitivity Levels

Visual Sensitivity Levels	Route Miles
Low	363.16
Moderate	2,624.08
High	2,506.22

Table 4.2-1. Miles on Fragile Soils by Alternative

Designation Type	Alternative A	Alternative B	Alternative C	Alternative D
Open	4,684.32	1,554.10	2,933.04	3,840.03
Limited	35.59	952.20	506.39	185.01
Closed	0	2,213.62	1,280.48	694.87
Total[1]	**4,719.91**	**4,719.91**	**4,719.91**	**4,719.91**

[1] Differences due to rounding.

Table 4.2-2. Miles on Soils with Moderate or Severe Water Erosion Potential

Designation Type	Alternative A	Alternative B	Alternative C	Alternative D
Open	3,522.68	1,094.54	2,140.21	2,860.22
Limited	35.09	730.29	384.67	156.48
Closed	0	1,732.94	1,032.89	541.07
Total[1]	**3,557.77**	**3,557.77**	**3,557.77**	**3,557.77**

[1] Differences due to rounding.

Table 4.2-3. Miles on Soils with Moderate or Severe Wind Erosion Potential

Designation Type	Alternative A	Alternative B	Alternative C	Alternative D
Open	2,128.18	705.32	1,299.40	1,793.62
Limited	0.86	412.65	192.34	53.17
Closed	0	1,011.06	637.30	282.25
Total[1]	**2,129.04**	**2,129.04**	**2,129.04**	**2,129.04**

Wind erodibility group rating of 1-3 severe, 4-5 moderate, 6-8 slight.

[1] Differences due to rounding.

Table 4.2-4. Miles and on Routes with Moderate or Poor Road Suitability

Designation Type	Alternative A	Alternative B	Alternative C	Alternative D
Open	4,366.76	1,366.99	2,657.93	3,574.85
Limited	35.41	897.20	464.60	181.73
Closed	0	2,137.97	1,279.64	645.59
Total[1]	**4,402.17**	**4,402.17**	**4,402.17**	**4,402.17**

[1] Differences due to rounding,

Table 4.3-1. Number of Perennial Stream Crossings by Alternative

Designation Type	Alternative A	Alternative B	Alternative C	Alternative D
Open	4	0	2	2
Limited	0	1	1	1
Closed	0	3	1	1
Total	**4**	**4**	**4**	**4**

Table 4.3-2. Number of Intermittent Stream Crossings by Alternative

Designation Type	Alternative A	Alternative B	Alternative C	Alternative D
Open	772	221	500	649
Limited	4	175	77	28
Closed	0	380	199	99
Total	**776**	**776**	**776**	**776**

Table 4.4-1. SWReGAP Vegetation Types Found Within the Analysis Area

Vegetation Type	Miles	Percent of Analysis Area
Apacherian-Chihuahuan Mesquite Upland Scrub	751.21	3.83
Apacherian-Chihuahuan Piedmont Semi-Desert Grassland and Steppe	89.18	0.45
Barren Lands	182.17	0.93
Colorado Plateau Blackbrush-Mormon-tea Shrubland	38.13	0.19
Colorado Plateau Mixed Bedrock Canyon and Tableland	45.14	0.23
Colorado Plateau Pinyon-Juniper Woodland	385.38	1.96
Developed, Medium - High Intensity	91.95	0.47
Developed, Open Space - Low Intensity	117.25	0.6
Great Basin Pinyon-Juniper Woodland	1,255.90	6.4
Inter-Mountain Basins Big Sagebrush Shrubland	70.50	0.36
Inter-Mountain Basins Juniper Savanna	37.85	0.19
Inter-Mountain Basins Mixed Salt Desert Scrub	20.14	0.1
Inter-Mountain Basins Montane Sagebrush Steppe	0.05	<0.01
Inter-Mountain Basins Semi-Desert Grassland	71.07	0.36
Inter-Mountain Basins Semi-Desert Shrub Steppe	221.58	1.13
Invasive Annual and Biennial Forbland	37.25	0.19
Invasive Southwest Riparian Woodland and Shrubland	32.15	0.16
Madrean Juniper Savanna	38.76	0.2
Madrean Pine-Oak Forest and Woodland	66.86	0.34
Madrean Pinyon-Juniper Woodland	357.23	1.82
Mogollon Chaparral	1,092.88	5.57
Mojave Mid-Elevation Mixed Desert Scrub	2,635.30	13.43
North American Warm Desert Badland	0.48	<0.01
North American Warm Desert Bedrock Cliff and Outcrop	43.91	0.22

Vegetation Type	Miles	Percent of Analysis Area
North American Warm Desert Lower Montane Riparian Woodland and Shrubland	17.89	0.09
North American Warm Desert Pavement	22.45	0.11
North American Warm Desert Playa	29.06	0.15
North American Warm Desert Riparian Mesquite Bosque	14.69	0.07
North American Warm Desert Riparian Woodland and Shrubland	39.01	0.2
North American Warm Desert Volcanic Rockland	0.28	<0.01
North American Warm Desert Wash	47.5	0.24
Open Water	3.24	0.02
Recently Burned	20.61	0.11
Recently Mined or Quarried	32.39	0.17
Rocky Mountain Ponderosa Pine Woodland	43.48	0.22
Sonora-Mojave Creosotebush-White Bursage Desert Scrub	3,496.37	17.82
Sonora-Mojave Mixed Salt Desert Scrub	266.93	1.36
Sonoran Mid-Elevation Desert Scrub	2,964.96	15.11
Sonoran Paloverde-Mixed Cacti Desert Scrub	4,940.62	25.18

Source: USGS National GAP Analysis Program 2004

Table 4.4-2. Miles of Closed Routes Crossing SWReGAP Vegetation Types Within the Analysis Area

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Apacherian-Chihuahuan Mesquite Upland Scrub	0	33.26	18.05	10.10
Apacherian-Chihuahuan Piedmont Semi-Desert Grassland and Steppe	0	0.67	0.60	0.09
Barren Lands	0	6.74	4.15	2.43
Colorado Plateau Blackbrush-Mormon-tea Shrubland	0	2.85	1.05	0.15
Colorado Plateau Mixed Bedrock Canyon and Tableland	0	0.28	0.28	0.10
Colorado Plateau Pinyon-Juniper Woodland	0	102.87	40.93	0
Developed, Medium - High Intensity	0	2.79	2.08	0.02
Developed, Open Space - Low Intensity	0	1.05	0.19	0.08
Great Basin Pinyon-Juniper Woodland	0	100.18	55.48	23.06
Inter-Mountain Basins Big Sagebrush Shrubland	0	4.82	1.00	0.38
Inter-Mountain Basins Juniper Savanna	0	1.02	0.60	0.27
Inter-Mountain Basins Mixed Salt Desert Scrub	0	1	0.63	0.58
Inter-Mountain Basins Montane Sagebrush Steppe	0	0.03	0	0
Inter-Mountain Basins Semi-Desert Grassland	0	9.62	2.29	0.33
Inter-Mountain Basins Semi-Desert Shrub Steppe	0	18.69	12.00	6.60
Invasive Annual and Biennial Forbland	0	0.17	0.13	0.10
Invasive Southwest Riparian Woodland and Shrubland	0	0.64	0.567	0.56
Madrean Juniper Savanna	0	0.04	0	0
Madrean Pine-Oak Forest and Woodland	0	1.73	1.42	0.59
Madrean Pinyon-Juniper Woodland	0	23.60	15.15	8.63
Mogollon Chaparral	0	185.48	95.79	47.61
Mojave Mid-Elevation Mixed Desert Scrub	0	415.49	237.64	119.09
North American Warm Desert Badland	0	0.05	0	0
North American Warm Desert Bedrock Cliff and Outcrop	0	0.99	0.50	0.11

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
North American Warm Desert Lower Montane Riparian Woodland and Shrubland	0	0.21	0.19	0.19
North American Warm Desert Pavement	0	0.22	0.05	0.05
North American Warm Desert Playa	0	6.34	0	0
North American Warm Desert Riparian Mesquite Bosque	0	0.28	0.21	0.18
North American Warm Desert Riparian Woodland and Shrubland	0	0.53	0.319	0.31
North American Warm Desert Volcanic Rockland	0	0.01	0	0
North American Warm Desert Wash	0	1.71	1.30	0.35
Open Water	0	0.03	0.03	0.02
Recently Burned	0	0.24	0	0
Recently Mined or Quarried	0	0.34	0.10	0
Rocky Mountain Ponderosa Pine Woodland	0	0.95	0.71	0.57
Sonora-Mojave Creosotebush-White Bursage Desert Scrub	0	697.46	433.24	249.27
Sonora-Mojave Mixed Salt Desert Scrub	0	12.46	8.05	3.71
Sonoran Mid-Elevation Desert Scrub	0	433.72	236.19	138.52
Sonoran Paloverde-Mixed Cacti Desert Scrub	0	650.51	453.86	194.48

Source: USGS National GAP Analysis Program 2004

Table 4.4-3. Miles of Limited (Admin and Authorized) Routes Crossing SWReGAP Vegetation Types Within the Analysis Area

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Apacherian-Chihuahuan Mesquite Upland Scrub	0.14	22.33	7.91	2.50
Apacherian-Chihuahuan Piedmont Semi-Desert Grassland and Steppe	0	2.66	0.01	0
Barren Lands	0	4.27	0.39	0.18
Colorado Plateau Blackbrush-Mormon-tea Shrubland	0	0.40	0.48	0.02
Colorado Plateau Mixed Bedrock Canyon and Tableland	0	0.19	0	0
Colorado Plateau Pinyon-Juniper Woodland	0	66.38	15.59	5.63
Developed, Medium - High Intensity	0	0.26	0.27	0.01
Developed, Open Space - Low Intensity	0	0.89	0	0
Great Basin Pinyon-Juniper Woodland	0	39.79	17.94	4.75
Inter-Mountain Basins Big Sagebrush Shrubland	0	2.88	1.92	0.51
Inter-Mountain Basins Juniper Savanna	0	1.54	0.68	0
Inter-Mountain Basins Mixed Salt Desert Scrub	0	0.27	0.37	0.05
Inter-Mountain Basins Montane Sagebrush Steppe	0	4.24	0	0.43
Inter-Mountain Basins Semi-Desert Grassland	0	18.50	0.60	0
Inter-Mountain Basins Semi-Desert Shrub Steppe	0	0.37	4.34	0
Invasive Annual and Biennial Forbland	0	0.10	0	0
Invasive Southwest Riparian Woodland and Shrubland	0	0.07	0.07	0.07
Madrean Juniper Savanna	0	0.99	0	0
Madrean Pine-Oak Forest and Woodland	0	28.539	0.66	0.02
Madrean Pinyon-Juniper Woodland	1.42	103.86	6.03	1.60
Mogollon Chaparral	0.85	190.38	24.00	5.98
Mojave Mid-Elevation Mixed Desert Scrub	0.01	0.13	75.12	18.94
North American Warm Desert Badland	0	1.31	0	0
North American Warm Desert Bedrock Cliff and Outcrop	0	0.23	0.07	0

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
North American Warm Desert Lower Montane Riparian Woodland and Shrubland	0	0.81	0	0
North American Warm Desert Pavement	0	0.23	0	0
North American Warm Desert Playa	<0.01	0.53	<0.01	0
North American Warm Desert Riparian Mesquite Bosque	0	0.19	0.01	0.01
North American Warm Desert Riparian Woodland and Shrubland	0	0.05	0.46	0.40
North American Warm Desert Volcanic Rockland	0	0.04	0	0
North American Warm Desert Wash	0	1.76	0.05	0.056
Open Water	0	148.48	0.05	0
Recently Burned	0	3.30	<0.01	0
Recently Mined or Quarried	0	136.51	0.01	0
Rocky Mountain Ponderosa Pine Woodland	0.11	203.77	0.41	0.41
Sonora-Mojave Creosotebush-White Bursage Desert Scrub	0.18	22.33	79.28	22.16
Sonora-Mojave Mixed Salt Desert Scrub	0	2.66	1.49	0.035
Sonoran Mid-Elevation Desert Scrub	1.29	4.27	76.04	16.26
Sonoran Paloverde-Mixed Cacti Desert Scrub	1.81	0.40	84.75	20.60

Source: USGS National GAP Analysis Program 2004

Table 4.4-4. Miles of Limited (Admin and Seasonal) Routes Crossing SWReGAP Vegetation Types Within the Analysis Area

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Apacherian-Chihuahuan Mesquite Upland Scrub	0	0	0.74	0.02
Barren Lands	0	0	0.057	0
Great Basin Pinyon-Juniper Woodland	0	0.062	3.17	0.31
Mogollon Chaparral	0	0	1.92	0
Mojave Mid-Elevation Mixed Desert Scrub	0	0.63	6.10	0.65
North American Warm Desert Bedrock Cliff and Outcrop	0	0	0.07	0.07
North American Warm Desert Pavement	0	0	0.08	0
Sonora-Mojave Creosotebush-White Bursage Desert Scrub	0	2.30	19.44	6.88
Sonora-Mojave Mixed Salt Desert Scrub	0	0	0.32	0.02
Sonoran Mid-Elevation Desert Scrub	0	0.83	27.75	4.143
Sonoran Paloverde-Mixed Cacti Desert Scrub	0	0	4.85	0

Source: USGS National GAP Analysis Program 2004

Table 4.4-5. Miles of Limited (Non-Motorized) Routes Crossing SWReGAP Vegetation Types Within the Analysis Area

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Apacherian-Chihuahuan Mesquite Upland Scrub	1.11	0.66	0.62	0.62
Colorado Plateau Pinyon-Juniper Woodland	0	0	0	2.75
Developed, Open Space - Low Intensity	0	0	4.07	0
Great Basin Pinyon-Juniper Woodland	0	6.93	0	0
Invasive Southwest Riparian Woodland and Shrubland	0.64	0.64	0.64	0.64
Mogollon Chaparral	7.81	20.02	8.05	8.02
Mojave Mid-Elevation Mixed Desert Scrub	1.24	11.58	9.77	8.92
North American Warm Desert Bedrock Cliff and Outcrop	0.02	0.02	0.02	0.02

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
North American Warm Desert Riparian Woodland and Shrubland	0.01	0.01	0.01	0.01
Recently Burned	0	0.11	0	0
Rocky Mountain Ponderosa Pine Woodland	1.06	1.67	1.05	1.057
Sonora-Mojave Creosotebush-White Bursage Desert Scrub	11.91	12.26	12.44	12.04
Sonora-Mojave Mixed Salt Desert Scrub	0	0	0	0
Sonoran Mid-Elevation Desert Scrub	6.58	17.43	15.90	14.84
Sonoran Paloverde-Mixed Cacti Desert Scrub	0	0	0.30	0.76

Source: USGS National GAP Analysis Program 2004

Table 4.4-6. Miles of Limited (OHV Width) Routes Crossing SWReGAP Vegetation Types Within the Analysis Area

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Great Basin Pinyon-Juniper Woodland	0	0.29	1.89	6.55
Mogollon Chaparral	0	3.52	13.82	8.77
Mojave Mid-Elevation Mixed Desert Scrub	0	0	1.06	1.96
Sonora-Mojave Creosotebush-White Bursage Desert Scrub	0	0	0	3.64
Sonora-Mojave Mixed Salt Desert Scrub	0	0	0.28	<0.01
Sonoran Mid-Elevation Desert Scrub	0	0.04	20.04	17.49
Sonoran Paloverde-Mixed Cacti Desert Scrub	0	0	0.43	5.24

Source: USGS National GAP Analysis Program 2004

Table 4.4-7. Miles of Open Routes Crossing SWReGAP Vegetation Types Within the Analysis Area

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Apacherian-Chihuahuan Mesquite Upland Scrub	85.4	29.32	58.23	72.32
Apacherian-Chihuahuan Piedmont Semi-Desert Grassland and Steppe	5.79	2.45	5.16	5.69
Barren Lands	23.38	12.35	18.7	20.76
Colorado Plateau Blackbrush-Mormon-tea Shrubland	4.60	1.33	3.06	4.41
Colorado Plateau Mixed Bedrock Canyon and Tableland	0.51	0.03	0.22	0.40
Colorado Plateau Pinyon-Juniper Woodland	230.07	60.81	173.54	202.81
Developed, Medium - High Intensity	5.79	2.73	3.43	5.75
Developed, Open Space - Low Intensity	8.08	6.13	7.89	8.00
Great Basin Pinyon-Juniper Woodland	220.43	74.26	138.96	184.10
Inter-Mountain Basins Big Sagebrush Shrubland	9.75	2.04	6.81	8.84
Inter-Mountain Basins Juniper Savanna	4.70	2.13	3.41	4.43
Inter-Mountain Basins Mixed Salt Desert Scrub	1.57	0.28	0.55	0.93
Inter-Mountain Basins Montane Sagebrush Steppe	0.03	0	0.03	0.03
Inter-Mountain Basins Semi-Desert Grassland	25.15	11.27	22.24	24.80
Inter-Mountain Basins Semi-Desert Shrub Steppe	60.62	23.42	44.27	53.57
Invasive Annual and Biennial Forbland	0.95	0.39	0.81	0.84
Invasive Southwest Riparian Woodland and Shrubland	1.37	0.62	0.72	0.72
Madrean Juniper Savanna	1.22	0	0.12	0.12
Madrean Pine-Oak Forest and Woodland	3.08	0.34	0.98	2.45
Madrean Pinyon-Juniper Woodland	74.55	23.83	54.77	65.72
Mogollon Chaparral	480.19	175.96	345.26	418.45
Mojave Mid-Elevation Mixed Desert Scrub	898.95	282.10	570.48	750.61
North American Warm Desert Badland	0.06	0	0.05	0.05

Vegetation Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
North American Warm Desert Bedrock Cliff and Outcrop	1.31	0.18	0.65	1.12
North American Warm Desert Lower Montane Riparian Woodland and Shrubland	1.63	0.10	1.43	1.43
North American Warm Desert Pavement	0.71	0.24	0.56	0.65
North American Warm Desert Playa	15.11	7.95	15.11	15.11
North American Warm Desert Riparian Mesquite Bosque	0.57	0.05	0.33	0.36
North American Warm Desert Riparian Woodland and Shrubland	1.48	0.40	0.70	0.76
North American Warm Desert Volcanic Rockland	0.02	1.65	0.01	0.01
North American Warm Desert Wash	3.56	0	2.20	3.15
Open Water	0.11	0.01	0.01	0.08
Recently Burned	1.22	0.85	1.21	1.22
Recently Mined or Quarried	0.39	0	0.27	0.39
Rocky Mountain Ponderosa Pine Woodland	6.55	3.31	5.53	5.68
Sonora-Mojave Creosotebush-White Bursage Desert Scrub	1,236.40	387.98	703.79	954.47
Sonora-Mojave Mixed Salt Desert Scrub	24.24	8.46	14.36	20.46
Sonoran Mid-Elevation Desert Scrub	903.82	323.13	535.74	720.41
Sonoran Paloverde-Mixed Cacti Desert Scrub	1,114.90	262.41	572.50	895.61

Source: USGS National GAP Analysis Program 2004

Table 4.6-1. Miles of Closed Routes Crossing Bighorn Sheep Habitat within the Analysis Area

Habitat Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Low Value Habitat	0	62.08	31.46	15.36
Medium Value Habitat	0	116.90	70.31	50.82
High Value Habitat	0	38.97	24.61	11.35
Lambing Grounds	0	1.53	1.46	0.69

Source: BLM Kingman Field Office GIS data.

Table 4.6-2. Miles of Limited (Admin and Authorized) Routes Crossing Bighorn Sheep Habitat within the Analysis Area

Habitat Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Low Value Habitat	0	2.39	1.49	0.05
Medium Value Habitat	0	27.13	7.91	1.31
High Value Habitat	0	10.02	6.67	4.43
Lambing Grounds	0	0.23	0	0

Source: BLM Kingman Field Office GIS data.

Table 4.6-3. Miles of Limited (Admin and Seasonal) Routes Crossing Bighorn Sheep Habitat within the Analysis Area

Habitat Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Low Value Habitat	0	0	0	0
Medium Value Habitat	0	0.41	21.49	4.07
High Value Habitat	0	0	6.60	0
Lambing Grounds	0	0	0.23	0

Source: BLM Kingman Field Office GIS data.

Table 4.6-4. Miles of Limited (Non-Motorized) Routes Crossing Bighorn Sheep Habitat within the Analysis Area

Habitat Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Low Value Habitat	0	0	0.37	0
Medium Value Habitat	2.27	2.27	3.70	2.27
High Value Habitat	0	0	0	0
Lambing Grounds	0	0	0	0

Source: BLM Kingman Field Office GIS data.

Table 4.6-5. Miles of Limited (OHV Width) Routes Crossing Bighorn Sheep Habitat within the Analysis Area

Habitat Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Low Value Habitat	0	0	11.34	3.71
Medium Value Habitat	0	0	0	7.12
High Value Habitat	0	0	0	2.42
Lambing Grounds	0	0	0	0

Source: BLM Kingman Field Office GIS data.

Table 4.6-6. Miles of Open Routes Crossing Bighorn Sheep Habitat within the Analysis Area

Habitat Type	Alt A (miles)	Alt B (miles)	Alt C (miles)	Alt D (miles)
Low Value Habitat	98.29	33.82	53.62	79.17
Medium Value Habitat	224.06	79.62	122.92	160.74
High Value Habitat	82.73	33.74	44.87	64.54
Lambing Grounds	6.82	5.05	5.12	6.13

Source: BLM Kingman Field Office GIS data.

Table 4.7-1. Miles of Routes Crossing Southwestern Willow Flycatcher Critical Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	0.42 [51]	0.19 [24]	0.07 [9]
Limited (Admin and Authorized Users)	0	0.15 [18]	0.36 [44]	0
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	0	0	0	0
Limited (OHV Width)	0	0	0	0
Open	0.82 [100]	0.25 [31]	0.26 [32]	0.74 [91]

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-2. Miles of Routes Crossing Southwestern Willow Flycatcher Occupied Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	5.87 [75]	3.89 [51]	1.52 [20]
Limited (Admin and Authorized Users)	0	1.93 [25]	1.20 [16]	0
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	0	0	0	0
Limited (OHV Width)	0	0	0	0
Open	7.80 [100]	0	2.6 [34]	6.2 [80]

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-3. Miles of Routes Crossing Southwestern Willow Flycatcher Occupied Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	0.66 [49]	0.37 [28]	0.37 [28]
Limited (Admin and Authorized Users)	0	0.18 [13]	0	0
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	0	0	0	0
Limited (OHV Width)	0	0	0	0
Open	1.33 [100]	0.50 [37]	0.96 [72]	0.96 [72]

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-4. Miles of Routes Crossing Yellow-billed Cuckoo Potential Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	4.47 [93]	4.36 [91]	0
Limited (Admin and Authorized Users)	0	0	0	0
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	0	0	0	0
Limited (OHV Width)	0	0	0	0
Open	4.80 [100]	0.33 [7]	0.44 [9]	4.80 [100]

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-5. Miles of Routes Crossing Mexican Spotted Owl Potential Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	1.18 [12]	0.86 [9]	0.73 [8]
Limited (Admin and Authorized Users)	0.07 [1]	3.21 [33]	0.32 [3]	0.32 [3]
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	1.12 [12]	1.12 [12]	1.12 [12]	1.12 [12]
Limited (OHV Width)	0	0	0.02 [<1]	0.02 [<1]
Open	8.55 [88]	4.23 [43]	7.41 [76]	7.54 [78]

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-6. Miles of Routes Crossing Northern Mexican Gartersnake Occupied Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	1.24 [57]	1.18 [54]	0.50 [23]
Limited (Admin and Authorized Users)	0	0.74 [34]	0.24 [11]	0
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	0	0	0	0
Limited (OHV Width)	0	0	0	0
Open	2.19 [100]	0.20 [9]	0.77 [35]	1.69 [77]

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-7. Miles of Routes Crossing Northern Mexican Gartersnake Potential Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	0.01 [100]	0.01 [100]	0.01 [100]
Limited (Admin and Authorized Users)	0	0	0	0
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	0	0	0	0
Limited (OHV Width)	0	0	0	0
Open	0.01 [100]	0	0	0

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-8. Miles of Routes Crossing Arizona Cliffrose Occupied Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	2.71 [47]	2.71 [47]	0.21 [4]
Limited (Admin and Authorized Users)	0	1.59 [28]	0.92 [16]	0
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	0	0	0	0
Limited (OHV Width)	0	0	0	0
Open	5.79 [100]	1.48 [26]	2.15 [37]	5.57 [96]

Source: BLM Kingman Field Office GIS data.
*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-9. Miles of Routes Crossing Lowland Leopard Frog Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	4.97 [49]	2.33 [23]	1.24 [12]
Limited (Admin and Authorized Users)	0	1.72 [17]	3.02 [30]	0.44 [4]
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	0	0	0	0
Limited (OHV Width)	0	0	0	0
Open	10.11 [100]	3.41 [34]	4.76 [47]	8.43 [83]

Source: BLM Kingman Field Office GIS data. .
*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-10. Miles of Routes Crossing Sonoran Desert Tortoise Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	1,401.18 [46]	825.25 [27]	405.13 [13]
Limited (Admin and Authorized Users)	5.59 [<1]	580.16 [19]	271.50 [9]	68.32 [2]
Limited (Admin and Seasonal)	0	2.59 [<1]	40.59 [1]	9.88 [<1]
Limited (Non-Motorized)	14.43 [1]	52.43 [2]	35.04 [1]	32.10 [1]
Limited (OHV Width)	0	3.86 [<1]	35.88 [1]	38.69 [1]
Open	3,020.28 [99]	1,000.07 [33]	1,832.02 [60]	2,486.17 [82]

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.7-11. Miles of Routes Crossing Hualapai Mexican Vole Habitat within the Analysis Area

Route Type	Alt A (miles) [percent*]	Alt B (miles) [percent*]	Alt C (miles) [percent*]	Alt D (miles) [percent*]
Closed	0	1.18 [12]	0.87 [9]	0.73 [8]
Limited (Admin and Authorized Users)	0.07 [1]	3.21 [33]	0.33 [3]	0.33 [3]
Limited (Admin and Seasonal)	0	0	0	0
Limited (Non-Motorized)	1.12 [12]	1.12 [12]	1.12 [12]	1.12 [12]
Limited (OHV Width)	0	0	0.02 [<1]	0.02 [<1]
Open	8.56 [88]	4.23 [43]	7.41 [76]	7.55 [77]

Source: BLM Kingman Field Office GIS data.

*Percentages calculated for each alternative and may not add up to 100 percent due to rounding errors

Table 4.8-1. Route Distances (miles) and Densities (mi/mi^2) within Grazing Allotments1

Route Type	Alternative A	Alternative B	Alternative C	Alternative D
Open	5,011.58	1,545.35	3,073.95	4,111.28
Density	0.78	0.24	0.06	0.64
Limited (Administrative and Authorized)	5.83	944.89	374.57	82.03
Limited (Administrative and Seasonal)	0	3.84	55.87	12.12
Limited (Non-motorized)	19.74	59.48	40.63	37.82
Limited (OHV Width)	0	3.87	22.10	34.14
Closed	0	2,479.74	1,470.04	759.77
Total	**5,037.16**	**5,037.16**	**5,037.16**	**5,037.16**

[1]Differences are due to rounding.

Table 4.9-1. Comparison of Route Designation by Alternative within Areas Identified as Possessing Wilderness Characteristics (miles)[1]

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	328.63	206.28	104.66
Limited	0	122.04	50.25	9.40
Open	601.85	151.18	345.32	487.80
Total	601.85	601.87	601.85	601.86

[1]Differences are due to rounding.

Table 4.10-1. Routes within ACECs in the Analysis Area[1]

Route Type	Alternative A (miles)	Alternative B (miles)	Alternative C (miles)	Alternative D (miles)
Aubrey Peak Bighorn Sheep Habitat ACEC				
Open	10.30	0.77	7.45	8.95
Density (mi/mi^2)	1.91	0.20	1.37	1.66
Limited	0	3.48	0	0
Closed	0	6.06	2.85	1.36
Total	**10.30**	**10.30**	**10.30**	**10.30**

Route Type	Alternative A (miles)	Alternative B (miles)	Alternative C (miles)	Alternative D (miles)
Black Mountains Ecosystem Management ACEC				
Open	270.42	115.64	140.23	192.20
Density (mi/mi^2)	1.51	0.64	0.79	1.08
Limited	0	26.32	46.49	19.35
Closed	0	128.46	83.36	58.52
Total	**270.07**	**270.07**	**270.07**	**270.07**
Burrow Creek Riparian and Cultural ACEC				
Open	53.44	10.75	34.61	47.01
Density (mi/mi^2)	1.51	0.30	0.97	1.32
Limited	0	20.76	2.92	1.14
Closed	0	21.94	15.91	5.29
Total	**53.44**	**53.44**	**53.44**	**53.44**
Carrow-Stephens Ranches ACEC				
Open	1.93	1.45	1.45	1.45
Density (mi/mi^2)	2.28	1.71	1.71	1.71
Limited	0	0	0.48	0.48
Closed	0	0.48	0	0
Total	**1.93**	**1.93**	**1.93**	**1.93**
Clay Hills Research Natural Area ACEC				
Open	5.79	1.48	2.15	5.57
Density (mi/mi^2)	3.33	0.85	1.23	3.18
Limited	0	1.59	0.92	0
Closed	0	2.71	2.71	0.22
Total	**5.79**	**5.79**	**5.79**	**5.79**

Route Type	Alternative A (miles)	Alternative B (miles)	Alternative C (miles)	Alternative D (miles)
Hualapai Mountain Research Natural Area ACEC				
Open	9.54	4.64	7.88	8.01
Density (mi/mi^2)	1.85	0.90	1.53	1.55
Limited	0	2.86	0	0
Closed	0	2.04	1.66	1.53
Total	**9.54**	**9.54**	**9.54**	**9.54**
Joshua Tree Forest – Grand Wash Cliffs ACEC				
Open	70.85	18.46	48.89	55.25
Density (mi/mi^2)	1.16	0.30	0.80	0.91
Limited	0	7.37	0.68	0.30
Closed	0	45.01	21.28	15.30
Total	**70.85**	**70.84**	**70.85**	**70.85**
McCracken Desert Tortoise Habitat ACEC				
Open	62.15	23.99	27.82	48.63
Density (mi/mi^2)	1.83	0.71	0.82	1.43
Limited	0	10.03	9.92	0.94
Closed	0	28.12	24.41	12.58
Total	**62.15**	**62.15**	**62.15**	**62.15**
Poachie Desert Tortoise Habitat ACEC				
Open	75.92	18.25	50.21	63.15
Density (mi/mi^2)	1.48	0.36	0.98	1.23
Limited	4.62	25.35	6.33	0.13
Closed	0	36.94	24.00	17.25
Total	**80.54**	**80.54**	**80.54**	**80.54**

Route Type	Alternative A (miles)	Alternative B (miles)	Alternative C (miles)	Alternative D (miles)
Three Rivers Riparian ACEC				
Open	113.42	21.47	44.67	76.59
Density (mi/mi^2)	2.27	0.43	0.89	1.53
Limited	0	10.07	2.76	7.33
Closed	0	81.88	66.00	29.50
Total	**113.41**	**113.41**	**113.41**	**113.41**
White-margined Penstemon Reserve ACEC				
Open	54.21	12.38	28.10	46.63
Density (mi/mi^2)	1.98	0.45	1.03	1.71
Limited	0	20.88	12.26	4.04
Closed	0	20.95	13.85	3.54
Total	**54.21**	**54.21**	**54.21**	**54.21**
Wright-Cottonwood Creeks Riparian and Cultural ACEC				
Open	55.69	13.84	37.56	45.38
Density (mi/mi^2)	1.31	0.32	0.88	1.06
Limited	0	18.03	9.65	4.40
Closed	0	23.82	8.49	5.92
Total	55.69	55.69	55.69	55.69

[1]Differences are due to rounding.

Table 4.11-1. Comparison of Routes within the NNL (miles)

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	7.50	3.96	3.57
Limited	0	1.19	0.30	0.30
Open	14.88	6.19	10.62	11.01
Total[1]	**14.88**	**14.88**	**14.88**	**14.88**

[1]Differences are due to rounding.

Table 4.12-1. Miles of Routes within 100 Feet of Known Cultural Resource Sites

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	69.66	42.72	22.52
Limited (Administrative and Authorized Users)	0	34.47	12.77	3.06
Limited (Administrative and Seasonal)	0	0	0.77	0
Limited (Non-Motorized)	0.76	0.90	2.12	1.27
Limited (OHV Width)	0	0	0.20	1.54
Open	204.37	100.11	146.47	176.75
Total[1]	**205.13**	**205.13**	**205.13**	**205.13**

[1]Differences in column totals due to rounding errors.

Table 4.12-2. Miles of Routes within 1/8-Mile of Cultural Resources

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	235.87	145.43	78.92
Limited (Administrative and Authorized Users)	0	103.85	44.48	12.76
Limited (Administrative and Seasonal)	0	0	4.23	0.36
Limited (Non-Motorized)	2.37	5.20	7.35	5.78
Limited (OHV Width)	0	0.13	2.09	3.07
Open	571.27	228.57	370.06	472.75
Total[1]	**573.64**	**573.64**	**573.64**	**573.64**

[1]Differences in column totals due to rounding errors.

Table 4.12-3. Number of Eligible or Potentially Eligible Cultural Resources within 100 Feet of Routes

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	64	30	14
Limited (Administrative and Authorized Users)	0	59	27	5
Limited (Administrative and Seasonal)	0	0	1	0
Limited (Non-Motorized)	0	2	2	2
Limited (OHV Width)	0	0	3	1
Open	199	74	136	177
Total	**199**	**199**	**199**	**199**

Table 4.12-4. Number of Eligible or Potentially Eligible Cultural Resources within 1/8-Mile of Routes

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	53	26	20
Limited (Administrative and Authorized Users)	0	37	19	3
Limited (Administrative and Seasonal)	0	0	2	0
Limited (Non-Motorized)	1	5	5	5
Limited (OHV Width)	0	0	0	0
Open	131	37	80	104
Total	**132**	**132**	**132**	**132**

Table 4.12-5. Miles of Routes within Low, Medium, and High Probability for Cultural Resources

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	Low – 0 Med. – 0 High – 0	Low – 138.5 Med. – 2,140.3 High – 421	Low – 75 Med. – 1,262 High – 272.3	Low – 41.6 Med. – 645.5 High – 138.2
Limited (Administrative and Authorized Users)	Low – 4.8 Med. – 1.1 High – 0	Low – 104.8 Med. – 744.5 High – 128	Low – 31.5 Med. – 302.2 High – 63.3	Low – 8 Med. – 73.3 High – 19.4
Limited (Administrative and Seasonal)	Low – 0 Med. – 0 High – 0	Low – 0 Med. – 1.9 High – 1.9	Low – 0.4 Med. – 55.5 High – 8.7	Low – 0 Med. – 10.1 High – 2
Limited (Non-Motorized)	Low – 6.1 Med. – 13.4 High – 10.8	Low – 11.6 Med. – 39.3 High – 20.3	Low – 6.4 Med. – 24.8 High – 21.7	Low – 6.5 Med. – 23.3 High – 19.8
Limited (OHV Width)	Low – 0 Med. – 0 High – 0	Low – 0.2 Med. – 3.7 High – 0	Low – 4.2 Med. – 32.4 High – 0.8	Low – 1.4 Med. – 31.9 High – 10.1
Open	Low – 358.2 Med. – 4,271.2 High – 791.3	Low – 114 Med. – 1,355.8 High – 230.9	Low – 251.6 Med. – 2,608.8 High – 435.4	Low – 311.5 Med. – 3,501.6 High – 612.8
Total[1]	**5456.9**	**5456.7**	**5457**	**54567**

[1]Differences in column totals due to rounding errors.

Table 4.13-1. Number of Prehistoric Cultural Resources within 100 Feet of Routes

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	61	31	13
Limited (Administrative and Authorized Users)	0	55	24	4
Limited (Administrative and Seasonal)	0	0	1	0
Limited (Non-Motorized)	1	2	2	2
Limited (OHV Width)	0	0	2	0
Open	193	76	134	175
Total	**194**	**194**	**194**	**194**

Table 4.13-2. Number of Prehistoric Cultural Resources within 1/8-Mile of Routes

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	60	30	20
Limited (Administrative and Authorized Users)	0	40	21	1
Limited (Administrative and Seasonal)	0	0	2	0
Limited (Non-Motorized)	0	1	1	1
Limited (OHV Width)	0	0	0	0
Open	139	38	85	117
Total	**139**	**139**	**139**	**139**

Table 4.13-3. Miles of Routes within Low, Medium, and High Prehistoric Site Probability

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	Low – 0 Med. – 0 High – 0	Low – 229.5 Med. – 1,992.6 High – 477.7	Low – 122.7 Med. – 1,197.7 High – 288.8	Low – 63.1 Med. – 601.2 High – 161
Limited (Administrative and Authorized Users)	Low – 5 Med. – 0.8 High – 0	Low – 157.9 Med. – 694.6 High – 124.9	Low – 52.4 Med. – 289 High – 55.5	Low – 10.3 Med. – 70.5 High – 19.9
Limited (Administrative and Seasonal)	Low – 0 Med. – 0 High – 0	Low – 0 Med. – 3.8 High – 0	Low – 0.6 Med. – 53.2 High – 10.7	Low – 0 Med. – 12.1 High – 0
Limited (Non-Motorized)	Low – 5.3 Med. – 11.1 High – 14	Low – 11.5 Med. – 31.8 High – 28	Low – 5.9 Med. – 20.8 High – 26.2	Low – 5.7 Med. – 19.5 High – 24.4
Limited (OHV Width)	Low – 0 Med. – 0 High – 0	Low – 0.4 Med. – 3.5 High – 0	Low – 5.3 Med. – 30.5 High – 1.6	Low – 4.3 Med. – 24.2 High – 14.1
Open	Low – 589 Med. – 4,002 High – 829	Low – 200 Med. – 1,288 High – 212.5	Low – 412.6 Med. – 2,423 High – 460.3	Low – 516.2 Med. – 3,286.1 High – 623.6
Total[1]	**5456.2**	**5456.7**	**5456.8**	**5456.2**

[1]Differnces in column totals due to rounding errors.

Table 4.14-1. Routes within a PFYC Classes by Alternative[1]

Route Type	Alternative A (miles)	Alternative B (miles)	Alternative C (miles)	Alternative D (miles)
PFYC Class 1 and 2 (low to very low potential)				
Open or Limited	2,548.32	1,353.81	1,887.17	2,188.05
Closed	0	1,194.51	661.16	360.27
Total	2,548.32	2,548.32	2,548.32	2,548.32
PFYC Class 3 and 4 (moderate to high potential)				
Open or Limited	1,149.36	576.77	802.13	980.27

Route Type	Alternative A (miles)	Alternative B (miles)	Alternative C (miles)	Alternative D (miles)
Closed	0	572.59	347.24	169.09
Total	1,149.36	1,149.36	1,149.36	1,149.36

[1]Differences due to rounding

Table 4.15-1. Total Miles of Open, Limited, and Closed Routes by Alternative

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Open	5,469.72	1,708.76	3,317.68	4,464.00
Limited	33.02	1,067.91	554.31	206.63
Closed	0	2,726.08	1,630.75	832.12
Total[1]	**5,502.74**	**5,502.74**	**5,502.74**	**5,502.74**

[1]Differences are due to rounding.

Table 4.15-2. Comparison of Routes (miles)[1]

Designation Category	Alternative A	Alternative B	Alternative C	Alternative D
Closed	0	2,726.08	1,630.75	832.12
Limited (Administrative and Authorized Users)	5.83	988.82	399.26	100.73
Limited (Administrative and Seasonal)	0	3.84	64.55	12.12
Limited (Non-Motorized)	27.19	71.38	52.93	49.73
Limited (OHV Width)	0	3.87	37.57	44.05
Open	5,469.72	1,708.76	3,317.68	4,464.00
Total	**5,502.74**	**5,502.74**	**5,502.74**	**5,502.74**

[1]Differences are due to rounding.